

Serial No. 10/531,444
Atty. Docket No. P70537US0

IN THE CLAIMS:

Please cancel claims 1-14 and add the following new claims:

Claims 1-14 (Cancelled).

15. (New) A method for security verification of a message (Msg) having a message owner and being transmitted and received in electronic form, comprising the steps of:

- on the transmitting side,
 - associating with the message for its subsequent security verification a univocal message identifier (ID_{Msg}) and a checking username (ID_{CR}) associated with the message owner for checking the identity of the message owner, at least said checking username (ID_{CR}) being assembled with the message and transmitted therewith, said assembling taking place by inserting the message identifier (ID_{Msg}) into the message (Msg) and applying a coding operation previously associated with said message owner to the result of the insertion, and

Serial No. 10/531,444
Atty. Docket No. P70537US0

transmitting the message using a transmitting device, and

- on the receiving side for security verification of a received message (Msg),

receiving the received message by a receiving device;

comparing the message identifier (ID_{Msg}) of the received message with previously received message identifiers and signaling whether or not a message having the same univocal message identifier (ID_{Msg}) associated therewith was previously received,

applying a decoding operation associated with a supposed owner of the received message to the checking username (ID_{CR}) of the owner associated with the received message to obtain an identifier (ID_{DCR}), and

ascertaining and signaling whether or not agreement exists between the univocal message identifier

Serial No. 10/531,444
Atty. Docket No. P70537US0

(ID_{Msg}) associated with the received message and the identifier (ID_{DCR}) obtained by said decoding operation performed on the checking username (ID_{CR}).

16. (New) The method in accordance with claim 15 further comprising, before transmission, assembling the univocal message identifier (ID_{Msg}) and the checking username (ID_{CR}) for checking the identity of the message owner in a unique compound identifier (ID_T).

17. (New) The method in accordance with claim 15 wherein on the transmitting side, with the message to be transmitted is also associated an owner identifier (ID_{owner}) and on the receiving side the decoding operation to be applied is selected from among a plurality of possible decoding operations on the basis of the owner identifier (ID_{owner}) associated with the received message.

18. (New) The method in accordance with claim 15 wherein the coding and decoding operations are keyed encryption and decryption operations.

19. (New) The method in accordance with claim 18 wherein encryption and decryption operations include public/private key.

20. (New) The method in accordance with claim 15 wherein ascertainment of the agreement between the univocal message identifier (ID_{Msg}) associated with the message received and the identifier (ID_{DCR}) includes verifying that said univocal message identifier (ID_{Msg}) and said identifier (ID_{DCR}) are the same.

21. (New) A system for performing security verification of a message (Msg) having a message owner and being transmitted by a transmitter and received by a receiver in electronic form comprising:

- in the transmitter,
 - a generator for generating a univocal message identifier (ID_{Msg}),
 - an encoding device configured to receive the message identifier (ID_{Msg}), insert said message identifier (ID_{Msg}) into the message (Msg), and apply a coding operation previously associated with said message owner to the result of the insertion to obtain a checking username

Serial No. 10/531,444
Atty. Docket No. P70537US0

(ID_{CR}) associated with the message to be transmitted for checking the identity of the message owner,

- a transmission element which associates the coded message and the checking username (ID_{CR}) to be transmitted with the univocal message identifier (ID_{Msg}), and

- in the receiver for security verification of a received message (Msg),

- a control device configured to compare the message identifier (ID_{Msg}) of the received message with previously received message identifiers to determine whether or not a message having the same univocal message identifier (ID_{Msg}) associated therewith was previously received,

- a decoding device configured to receive the checking username (ID_{CR}) associated with the received message and apply a decoding operation associated with a supposed owner of the received message to the checking username

Serial No. 10/531,444
Atty. Docket No. P70537US0

(ID_{CR}) of the owner associated with the received message to obtain an identifier (ID_{DCR}), and

- a verification device configured to ascertain and signal whether or not agreement exists between the univocal message identifier (ID_{Msg}) associated with the received message and the identifier (ID_{DCR}) obtained by said decoding operation performed on the checking username (ID_{CR}).

22. (New) The system in accordance with claim 21 wherein the encoding and decoding devices are keyed encryption and decryption devices.

23. (New) The system in accordance with claim 22 wherein the encryption and decryption devices are public/private key devices.

24. (New) A device for associated of security verification factors with a message (Msg) having a message owner and being transmitted in electronic form comprising:

Serial No. 10/531,444
Atty. Docket No. P70537US0

- a generator for generating a univocal message identifier (ID_{Msg}),
- an encoding device configured to receive the message identifier (ID_{Msg}), insert said message identifier (ID_{Msg}) into the message (Msg), and apply a coding operation previously associated with said message owner to the result of the insertion to obtain a checking username (ID_{CR}) associated with the message to be transmitted for checking the identity of the message owner, and
- a component which associates the coded message and the checking username (ID_{CR}) to be transmitted with the univocal message identifier (ID_{Msg}).

25. (New) The device in accordance with claim 24 wherein the encoding device is a keyed encryption device.

26. (New) The device in accordance with claim 24 wherein said device is configured to issue a compound identifier (ID_T) made up of a combination of the univocal message identifier (ID_{Msg}) and the

Serial No. 10/531,444
Atty. Docket No. P70537US0

checking username (ID_{CR}) for checking the identity of the message
owner.